

Project	IEEE 802.16 Broadband Wireless Access Working Group < http://ieee802.org/16 >	
Title	Comments on RS-RNG_RSP_ALLOC IE	
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Re:	IEEE 802.16j-07/019: "Call for Technical Comments Regarding IEEE Project 802.16j"	
Abstract	This contribution proposes a MS UL Burst Profile Change header.	
Purpose	Text proposal for 802.16j Baseline Document.	
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Comments on RS-RNG_RSP_ALLOC IE

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Introduction

RS BR header can be used to request bandwidth for its access link for the purposes of transmitting messages other than RNS-RSP. Therefore, we change the name of “RS-RNG_RSP_ALLOC IE” to “RS Bandwidth Allocation IE”. In addition, the “RS Bandwidth Allocation IE” is presented in R-MAP, thus, we move it from “Extended-2 DIUC IE” to “R-link specific IE”. Moreover, the “RCID_IE” and “Region_Flag” is introduced to reduce IE overhead.

In order to facilitate the incorporation of this proposal into IEEE 802.16j standard, specific changes to the baseline working document IEEE 802.16j-06/026r4 are listed below.

Text Proposal

[Change the following subclause 6.3.2.1.2.2.2.1 in line 41 of page 9:]

6.3.2.1.2.2.2.1 RS bandwidth request header (RS BR)

RS BR header may be sent by the RS to the MR-BS to request bandwidth for its access link for the purposes of transmitting a ~~RNG_RSP~~ messages (such as RNG-RSP, MOB_NBR-ADV).

[Change the following Table 385 in page 153:]

Table 385—Extended-2 DIUC code assignment for DIUC=14

0x0B	RS-RNG_RSP_ALLOC IE
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[Change the following subclause 8.4.5.4.29 in page 159:]

~~8.4.5.4.29 RS-RNG_RSP_ALLOC IE~~ 8.4.5.9.3 RS Bandwidth Allocation IE (RS BW-ALLOC IE)

This IE is transmitted to a ~~non-transparent~~ RS from MR-BS. This IE provides the allocation to RS for transmission of ~~RNG_RSP~~ messages to SMS.

Table 486a—~~RS-RNG_RSP_ALLOC IE~~ RS BW-ALLOC IE format

Name	Length	Description
RS-RNG_RSP_ALLOC IE <u>RS BW-ALLOC IE</u> {	4 bits	
Extended-2 DIUC <u>Type</u>	45 bits	<u>0x0B01</u>
<u>Length</u>	<u>4 bits</u>	<u>variable</u>
CID <u>RCID IE()</u>	16 bits <u>variable</u>	RS Connection Identifier <u>basic CID in RCID IE</u> <u>format (see 8.4.5.3.20.1)</u>
TID	4 bits	Transaction ID

<u>Region Flag</u>	<u>2 bits</u>	<u>0b00: RS shall be transmitted message on the burst described by the Message Region Field</u> <u>0b01: RS shall be transmitted message on the burst described by the first DL-MAP IE of the (compressed) DL-MAP message broadcasted by the RS.</u> <u>0b10: RS shall be transmitted message on the burst described by the second DL-MAP IE of the DL-MAP message broadcasted by the RS.</u> <u>0b11: reserved</u>
<u>If(Region Flag == 0b00){</u>		
<u>Message Region Field() {</u>		
DIUC	4 bits	
OFDMA Symbol Offset	8 bits	
Subchannel offset	6 bits	
Boosting	3 bits	000: normal (not boosted); 001: +6dB; 010: -6dB; 011: +9dB; 100: +3dB; 101: -3dB; 110: -9dB; 111: -12dB.
No. OFDMA Symbols	7 bits	
No. Subchannels	6 bits	
Repetition Coding Indication	2 bits	0b00 – No repetition coding 0b01 – Repetition coding of 2 used 0b10 – Repetition coding of 4 used 0b11 – Repetition coding of 6 used
<u>}</u>		
<u>}</u>		
}		

[Change the following Table 496c in page 161:]

Table 496c—R-link specific IE types

<u>0x01</u>	<u>RS BW-ALLOC IE</u>
<u>0x0102-1F</u>	Reserved